tSith compliments & thanks, fro. (See p. 76).

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## SAMUEL JOHN TRACY (1813-1901)

The Early Use of Anæsthetics at St. Bartholomew's Hospital, London

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A WEALTH of literature has been written relating to the early history of anæsthesia, particularly with regard to priority in discovering or administering various substances. The early pioneers remain on their pedestals, sharing the honours, of which there are sufficient for all, but we know little of the experiments that went on, as it were, behind the scenes. Very few experiments terminate in epoch-making discoveries; many end in complete failure. It is believed that an account of early work on anæsthesia at St. Bartholomew's Hospital will prove of interest.

In a letter to the Editor of the *Medical Times* written on July 28, 1850<sup>15</sup>, Samuel John Tracy infers that Bart.'s was anxiously watching the development of anæsthetic substances, and adopted the promising agents without delay. The letter is here reproduced, but it should be noted that while Tracy first mentions "anæsthetic agents" having been administered in 7,000 cases, this figure is later given for chloroform:

"SIR.—Having heard your statement questioned, that anæsthetic agents have been administered at St. Bartholomew's Hospital in 7,000 cases, I can assure you that you have rather under, than over stated the number. At the first introduction of sulphuric ether into this country as an anæsthetic agent, I gave it in several thousand cases for the extraction of teeth in St. Bartholomew's Hospital, besides in all the greater and lesser operations there performed. Then for a short period we gave chloric ether; and, on its introduction, chloroform. The last has been administered in every case requiring its use—in amputations, lithotomy, sounding the bladder, reductions of dislocations, ligature, and other operations on nævi, and almost every operation in surgery, including the extraction of several thousand teeth. It has been given in tetanus, in chorea, in delirium tremens, in cholera, and in many other diseases. The whole surgical staff of the hospital is of opinion, that it may be administered to almost any person, and at almost any age. I have myself administered it to patients from six weeks to almost 80 years of age; and the crowning fact, I think, is, that no patient has fallen a victim to its administration at St. Bartholomew's Hospital. If confidence in the use of chloroform has been for a moment shaken, let it be remembered that it has been administered 7,000 times at one hospital, without a single fatal result. I am, etc., S. J. TRACY,

Dentist to St. Bartholomew's and Christ's Hospitals."

Sir Benjamin Ward Richardson<sup>8</sup> has told us that after its discovery in 1831, chloroform had been employed as a remedy for asthma and similar conditions. While certain persons were searching for other substances with anæsthetic properties, some were attempting to



improve upon the method of administration of ether. Jacob Bell, head of the firm of Bell & Co., in Oxford Street, suggested that chloric ether should be used instead of rectified or sulphuric ether for inhalation. Richardson continues: "The suggestion was acted upon, and Mr. Lawrence, afterwards Sir William Lawrence, together with Mr. Holmes Coote, performed operations painlessly under chloric ether at the Hospital of St. Bartholomew." (p.242.) Lawrence<sup>6</sup> describes an operation on the eye while the patient was unconscious after inhaling the vapour of sulphuric ether. The



Fig. 1.—The shop of Daniel Ferguson, instrument maker to St. Bartholomew's Hospital, stood next to the Giltspur Street Gate, then situated on the site now occupied by the Medical College Library.

inhalation (managed by Mr. Hooper of Pall Mall East) and the operation, lasted six minutes, and Lawrence also mentions that several years previously he had amputated the leg of a drunken woman, who was apparently unconscious of what had occurred.

In January, 1847, Tracy<sup>13</sup> <sup>14</sup> sent almost identical letters to the Lancet and the London Medical Gazette describing a form of hookah pipe that he had devised for the administration of ether. He provided details of a case successfully operated upon by Frederick Carpenter Skey (1798-1872), and stated that the apparatus was manufactured by "Mr. Ferguson, instrument maker to the Hospital". (Fig. 1.) Also in 1847, Tracy<sup>12</sup> issued a pamphlet describing and illustrating his apparatus (Fig. 2). Daniel Ferguson published the tract, advertising therein both the apparatus and purest washed ether, from his premises at 21, Giltspur Street,



St. Bartholomew's Hospital. In this pamphlet, the preface of which is dated March 25, 1847, Tracy outlines details of the discovery of ether as an anæsthetic, and states that immediately it became known in this country, Mr. Skey requested him to extract teeth under its influence. Ferguson, the instrument maker, provided a common vapour inhaler for the administration.

But chloroform displaced ether, and Sir James Young Simpson's patients were probably the first in Great Britain to receive the new anæsthetic. He read a paper to the Medico-Chirurgical Society at

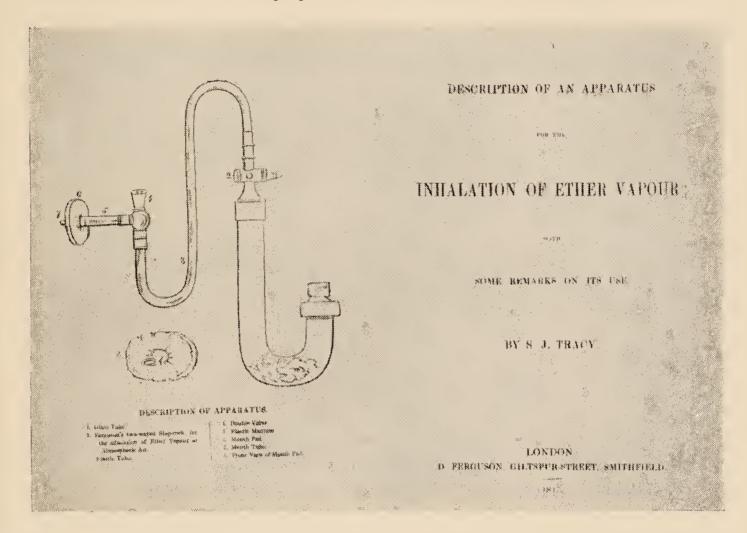


Fig. 2.—Frontispiece and title-page of S. J. Tracy's pamphlet describing his apparatus for the inhalation of ether vapour.

Edinburgh on November 10th, 1847, and the news quickly spread. It has been stated<sup>4</sup> that an order for 3 oz. of chloroform was sent from Bart.'s to Messrs. Heathfield of Edinburgh on November 27th, 1847. In the same letter it is suggested that it was unlikely to have been used in the Hospital before January, 1848. However, in a report printed in the *Lancet* Holmes Coote (1817-1872)<sup>1</sup> mentions an earlier administration, stating the source of the chloroform, and also the name of the administrator:

"On Saturday, November 20th, several operations were performed at St. Bartholomew's Hospital, upon patients rendered insensible to pain by the administration of chloroform, after the manner described in a recently-published pamphlet, by Professor Simpson, of Edinburgh, who first directed the attention of the profession to this new anæsthetic agent.

The chloroform was prepared for the Hospital by Mr. Taylor, of Vere-street, and was administered by Mr. Tracy, by means of a thin,



flat piece of sponge, impregnated with the fluid, and of sufficient size to cover the mouth and the apertures of the nose." (p.571.)

Coote also places on record Lawrence's earlier use of chloric

ether:

"Without wishing in any way to detract from the very great merit of Professor Simpson, in introducing this valuable agent, I may observe that for some considerable time Mr. Lawrence has used, in private practice, the chloric ether, which is chloroform in spirit and water." (p.572.)

John Snow (1813-1858), the first specialist anæsthetist<sup>11</sup>, insisted that the person administering chloroform should specialise, and that the task should not be delegated to dressers or house surgeons. In a letter to the *Medical Times and Gazette* he mentioned<sup>9</sup> that at St. George's and University College Hospitals the same persons had

administered chloroform for two or three years, adding:

"In St. Bartholomew's Hospital, the chloroform was long administered by Mr. Tracy, and all went on well; but since it has been entrusted to the dressers, two accidents have happened—one a fortnight ago, which was fatal; and one a few months ago, in a case of Mr. Stanley's which had well nigh ended fatally." (p.349.)

Edward Stanley (1793-1862)10 reported this latter case, comment-

ing on the use of chloroform in surgical operations.

Information on Samuel John Tracy is very scanty. He was appointed Dentist to St. Bartholomew's Hospital on October 9, 1849, after having performed the duties of dentist to the Hospital during the previous ten years. He is later mentioned as Curator of the Surgery at the Hospital, when the salary was increased from £120 to £140 per annum. He resigned this latter appointment on June 11, 1850, continuing in the office of Surgeon Dentist to the Hospital. He had become a Member of the Royal College of Surgeons in 1849, and in 1860 added the letters L.R.C.P. Edinburgh to his name by examination. Tracy was elected a Fellow of the Royal Medico-Chirurgical Society in 1850, and in the following year was living at 25 Finsbury Place. In 1852, the Medical Directory adds a further address, Abbey Lodge, Merton, Surrey. He was Dentist to Christ's Hospital as well as Bart.'s, and in 1854 was appointed to the Hospital for Women. In 1855 his London address was 28 Old Burlington Street, but the year 1874 found him living at number 69 Ladbroke Grove, where he apparently remained until his retirement. By 1857 he was also attending the Infant Orphanage Asylum, Wanstead, and in 1868 held an appointment at the Hospital for Incurables, Putney. In the issue of the Medical Directory for 1874 all Tracy's appointments are dropped, as if he had retired, although Sir Norman Moore<sup>7</sup> states that he had held office until 1897. Actually, Tracy resigned from the Dental Department at Bart.'s in a letter dated January 30, 1867, but continued to serve on the committee of the Apothecaries Shop for at least another fifteen By 1881 Tracy was living in Anglesey Crescent, Alverstoke,



Hants., and continued there, residing at various numbers in the Crescent until his death on September 10, 1901. He was then 88 years of age; his wife had died some years previously, but several daughters survived them. A bare announcement of Tracy's death appeared in the Lancet5, but two brief obituaries appeared in local newspapers<sup>2</sup> <sup>3</sup>. These provide no information respecting his professional career, beyond stating that he had formerly practised in London, mentioning that a funeral service was to be held in St. Mary's Church, Alverstoke on September 14, followed by burial in Highgate Cemetery on the same day.

Samuel John Tracy was employed in the Dental Department at Bart.'s both before and after he qualified as a surgeon. The introduction of anæsthesia interested him not only in connection with dentistry, but in its wider implications. He administered sulphuric ether "in several thousand cases for the extraction of teeth", gave chloric ether for a short period, and on its introduction, employed chloroform. Tracy was obviously keenly interested in improving the technique of administration of anæsthetics, and his quaint inhaler was apparently employed with success. His appointment as Dentist upon qualification in 1849 did not distract his interest, but on April 27, 1852 Patrick Black (1813-1879) was appointed as first administrator of chloroform. The need for a responsible administrator of anæsthetics, as advocated by John Snow, was appreciated, but it is interesting to speculate that had the position been made acceptable to Tracy, who had already had much experience of anæsthetics, he might have contributed more to our knowledge of the subject. Instead, he continued his dentistry work, outlived his contemporaries, and at his death left little behind to remind us of the part he played in the early days of anæsthesia at St. Bartholomew's Hospital.

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<sup>8</sup>Richardson Sir B. W. (1887), The Asclepiad, 4, 199.

<sup>9</sup>Snow, J. (1852), Medical Times and Gazette, N.S. 4 (O.S. 25), 349.

<sup>10</sup>Stanley, E. (1851), Medical Times, N.S. 3 (O.S. 24), 529.

<sup>11</sup>Thornton, J. L. (1950), Anæsthesia, 5, 129.

<sup>13</sup>Tracy, S. J. (1847), Lancet, I, 106.

<sup>15</sup>Tracy, S. J. (1850), *Medical Times*, **22**, 130.

<sup>&</sup>lt;sup>12</sup>Tracy, S. J. (1847), A description of an apparatus for the inhalation of ether vapour; with some remarks on its use, London.

<sup>&</sup>lt;sup>14</sup>Tracy, S. J. (1847), London Medical Gazette, N.S. 4, 167.

